THE DIAGNOSTIC VALUE OF HEART-TYPE FATTY ACID BINDING PROTEIN (h-FABP) RAPID TEST RELATED TO CARDIAC TROPONIN I IN NON ST ELEVATION MYOCARDIAL INFARCTION (NSTEMI)

Abstrak:

Acute coronary syndrome (ACS) is caused by atherosclerotic plaque rupture and microembolization which lead to decreased oxygen supply into the myocardium. Generally, ACS includes an unstable angina (UA), non ST elevation myocardial infarction (NSTEMI) and ST elevation myocardial infarction. ACS may lead to ST elevation Myocardial Infarction (STEMI) and finally a sudden death. Cardiac troponin is used routinely for diagnosing acute coronary syndrome (ACS); however, troponin is not elevated in the initial hours of ACS—precluding their usefulness in the early diagnosis. The aim of this study is to determine the diagnostic value of h-FABP Rapid test in relation to Cardiac Troponin I in NSTEMI. Seventy five patients with ACS were enrolled in this study. All patients presented symptoms within six hours of the onset and suffered typical chest pain. Blood samples were obtained for rapid test h-FABP (cardiodetect) and Troponin I (tropospot). The h-FABP showed a 93.5% sensitivity, 95% CI: 81.1–98.3 and 82.8% specificity, 95% CI: 63.5–93.5, Positive Predictive Value 89.6%, 95% CI: 76.6–96.1, Negative Predictive Value 88.9%, 95% CI: 69.7–97.1, respectively in the first six hours. Troponin I had a 60.9% sensitivity, 95% CI: 45.4–74.5 and 96.6% specificity, 95% CI: 80.4–99.8, Positive Predictive Value 96.6%, 95% CI: 80.4–99.8, Negative Predictive Value 60.9%, 95% CI: 45.4–74.5, respectively in the first six hours. Based on this study result on patients with Non ST Elevation Myocardial Infarction (NSTEMI), it is suggested to determine the h-FABP as well. For this purpose, point-of-care h-FABP test can be utilized, as it has the advantage of highly sensitivity and specificity, beside it can carry on a bedside testing and show a rapid test results as well.

Keyword:

h-FABP, Troponin I, NSTEMI, UA